Earth 435 Lab 2

Isometric block diagram showing folds and a fault

Is due on Jan 26, 2018

Name:

1. What is the stratigraphic sequence in the area? [6’]

2. Why are the strike lines of bedding not parallel to mapped contacts in the lower half of this map? [2’]

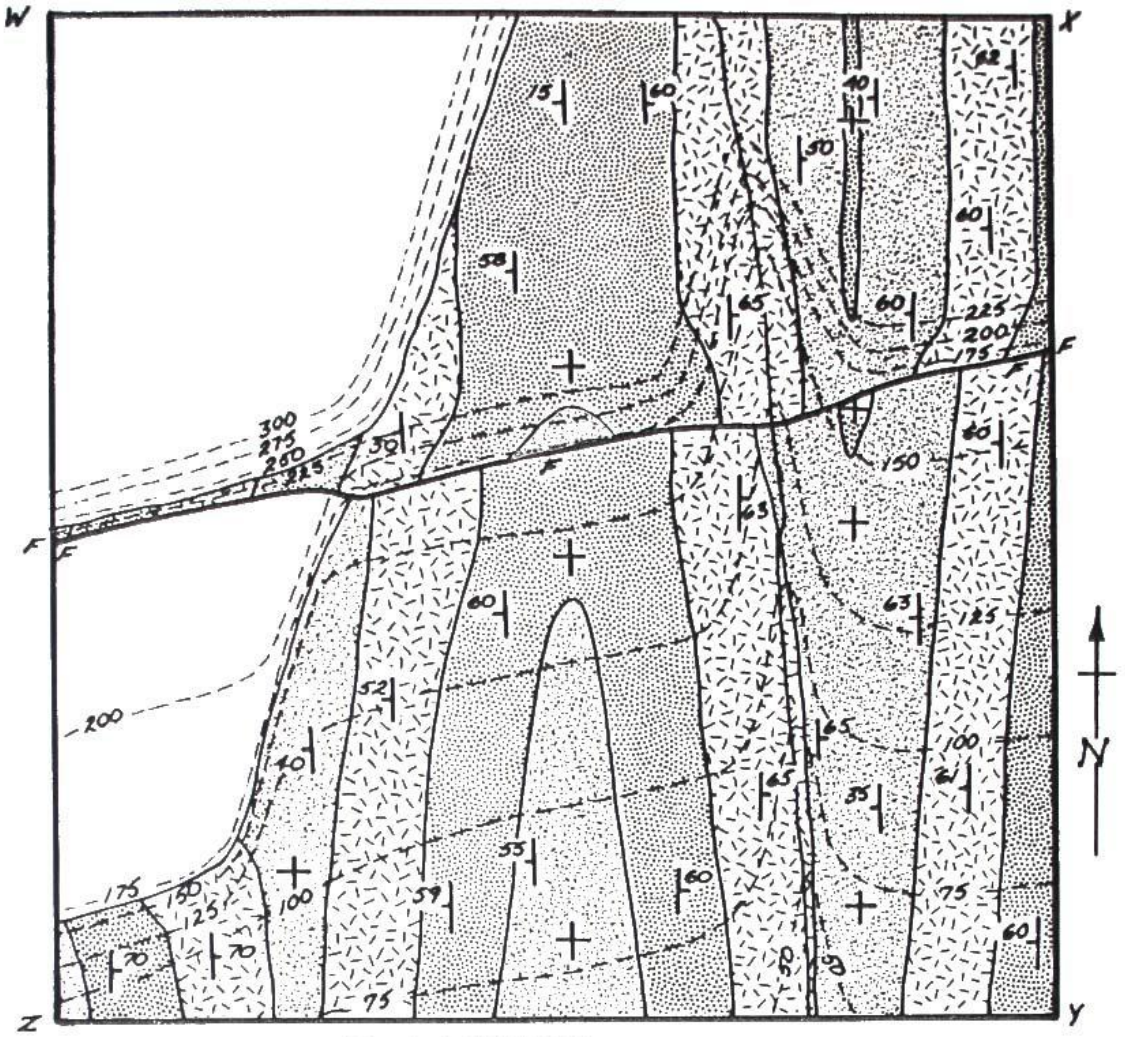
3. All the strike lines of bedding are parallel. What is the significance of this fact? [3’]

4. What is the angle of dip of the fault plane? Define the elements of a fault using a block diagram. Determine as many elements of the faults as possible. [6’]

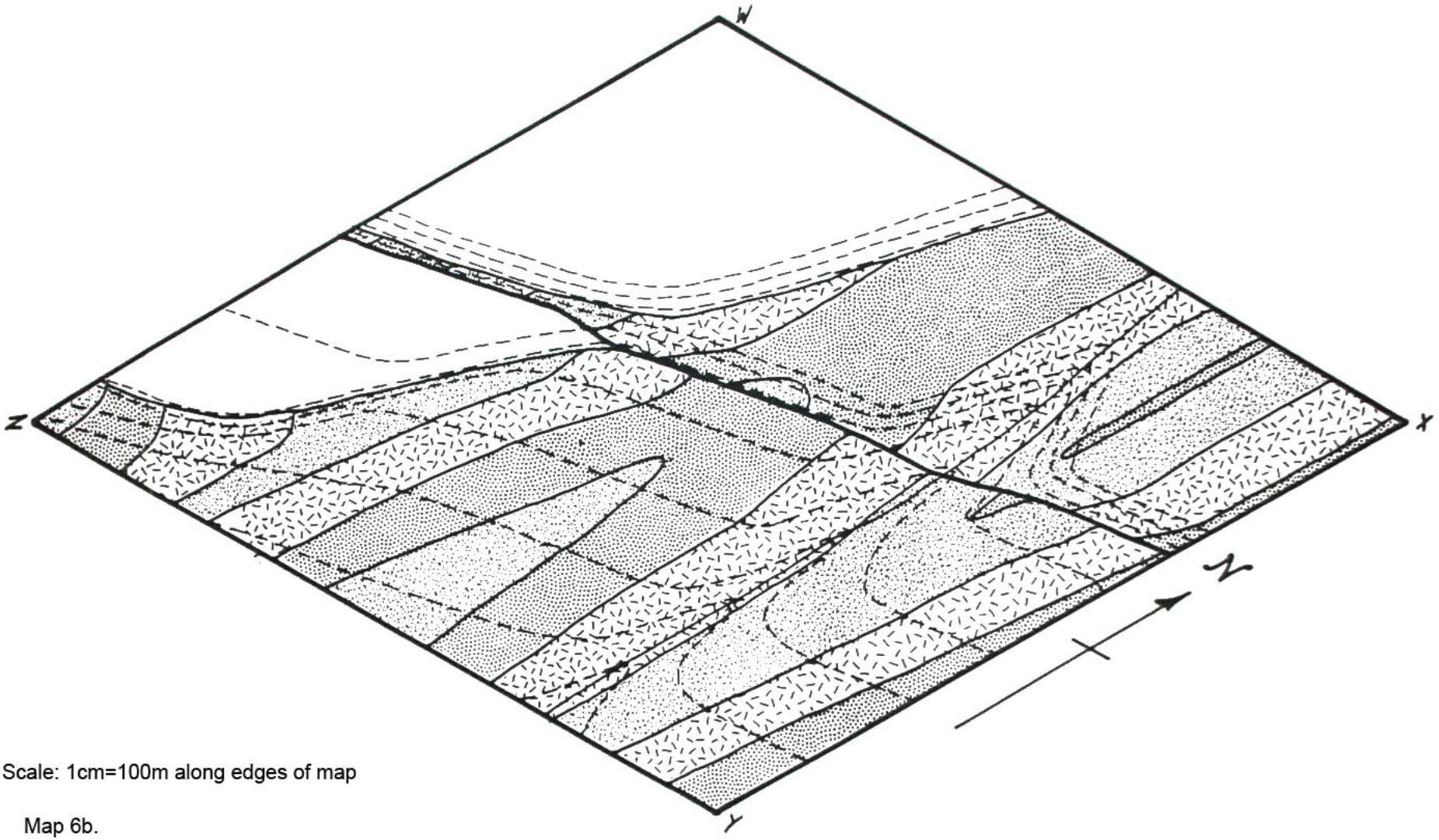
5. In Map 6b, Map 6a has been distorted to fit the isometric coordinates. Using this plan, construct an isometric block diagram to show the topography of the area, surface geology and vertical sections XY and YZ. Block should extend downwards to -250m. [13’]

6. Draw a stratigraphic column for the area. [5’]

7. Describe the geological history of the area. [5’]


W
X
Z
Y
F
N
300
275
250
225
200
175
150
125
100
75
Scale : 1 : 10,000
LEGEND
Conglomerate
Limestone
Sandstone
Shale
Strike & dip of bedding
Horizontal bedding
Fault
Geological contact
Contour (interval 25 m.

Map 6a



Scale: 1cm=100m along edges of map

Map 6b.